

Translation

PATENT COOPERATION TREATY

PCT/JP2003/013703



PCT

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference FOR200307PCT	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/JP2003/013703	International filing date (day/month/year) 27 October 2003 (27.10.2003)	Priority date (day/month/year) 30 October 2002 (30.10.2002)
International Patent Classification (IPC) or national classification and IPC G01N 22/00		
Applicant NICHIREI CORPORATION		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☒ (sent to the applicant and to the International Bureau) a total of 1 sheets, as follows:

☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

☒ Box No. I Basis of the report

☐ Box No. II Priority

☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

☐ Box No. IV Lack of unity of invention

☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

☐ Box No. VI Certain documents cited

☐ Box No. VII Certain defects in the international application

☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 25 March 2004 (25.03.2004)	Date of completion of this report 13 October 2004 (13.10.2004)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/013703

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ The international application as originally filed/furnished
- ☒ the description:
- pages _____ 1-12 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- pages _____ 2-4 _____, as originally filed/furnished
- pages* _____, as amended (together with any statement) under Article 19
- pages* _____ 1 _____ received by this Authority on _____ 20 August 2004 (20.08.2004)
- pages* _____ received by this Authority on _____
- ☒ the drawings:
- pages _____ 1/7-7/7 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-4	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-4	NO
Industrial applicability (IA)	Claims	1-4	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Document 1: JP 2740528 B2 (Tokai University), January 23, 1998

Document 2: Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 78565/1989 (Laid-open No. 17554/1991) (Denki Kagaku Keiki Kabushiki Kaisha), February 21, 1991

Document 3: Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 137987/1986 (Laid-open No. 47261/1988) (Kabushiki Kaisha Casio BOC), March 30, 1988

Document 4: Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 166799/1984 (Laid-open No. 82282/1986) (K.K. Yanagimoto Seisakujo), May 31, 1986

Document 5: JP 8-159990 A (Kao Corp.), June 21, 1996

Document 6: CD-ROM of the specification and drawings annexed to the request of Japanese Utility Model Application No. 46129/1992 (Laid-open No. 2218/1994) (Kabushiki Kaisha Sanko Denki Kenkyusho, Shinko Denki Keiso Kabushiki Kaisha), January 14, 1994

Document 7: JP 10-142169 A (Kao Corp.), May 29, 1998

Regarding the invention of claim 1/Documents 1-5/

Document 1 cited in the ISR describes a probe for physical properties measurement used in a physical properties measurement system that measures physical properties such as moisture content of an object of measurement based on measurement of complex dielectric constant of the object of measurement, comprising an internal electrode serving as a core and an external electrode disposed coaxially with the internal electrode.

Meanwhile, a technology for facilitating insertion of the probe into an object of measurement by making a probe end face inclined is a conventional, well-known art as can be seen in documents 2 and 3 and newly cited document 4, and using this well-known art in the invention described in document 1 to facilitate insertion of a probe into an object of measurement is not particularly difficult.

Using the well-known art in the invention described in document 1 to form an inclined end face enables a prescribed electrical length to be obtained; therefore, in terms of constitution, there is found to be no difference from the invention relating to claim 1.

Further, it is well known as can be seen in document 5 cited in the ISR that a probe for physical properties measurement based on a principle identical to that of the present application will have a different electrical length depending on the shape of its electrode end; it would be easy for a party skilled in the art to conceive of making an end face inclined to obtain a prescribed electrical length.

Therefore, the invention relating to claim 1 could be easily conceived of by a party skilled in the art based on the invention described in document 1 and the well-known art.

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of Box V:

Regarding the invention relating to claim 2/Documents 1-5/

As a coaxial cable is normally flexible, a party skilled in the art would naturally think that the cable described in document 1 also is flexible..

Also, as it is obvious that in the conventional, well-known probe for physical property measurement described in document 5 cited in the ISR, the coaxial cable and electrode are separate parts, a party skilled in the art would naturally think that they are removably attached. It is also natural that some coupling means is needed to attach and remove them.

Therefore, in the invention described in document 1, removably attaching an electrode and cable using coupling means as the well-known probe for physical properties measurement is not found to be particularly difficult.

Therefore, the invention relating to claim 2 could be easily conceived of by a party skilled in the art based on the invention described in document 1 and the well-known art.

Regarding the invention relating to claim 3/Documents 1-6/

A screw is commonly used coupling means (if necessary, see document 6 cited in the ISR); in the invention described in document 1, when an electrode and cable are to be removably configured, using a screw is not found to be particularly difficult.

Therefore, the invention relating to claim 3 could be easily conceived of by a party skilled in the art based on the invention described in document 1 and the well-known art.

Regarding the invention relating to claim 4/Documents 1-5 and 7/

The technology of adding a temperature sensor to a probe for physical properties measurement is a conventional, well-known art as described in document 7 cited in the ISR, and in the invention described in document 1 as well, adding a temperature sensor is not found to be particularly difficult.

Therefore, the invention relating to claim 4 could be easily conceived of by a party skilled in the art based on the invention described in document 1 and the well-known art.